

Australian Bureau of Statistics

6333.0 - Characteristics of Employment, Australia, August 2015

Previous ISSUE Released at 11:30 AM (CANBERRA TIME) 31/08/2016

Summary

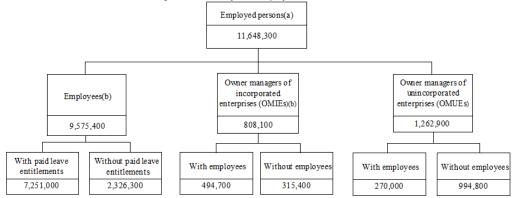
Key findings

KEY FINDINGS

The Characteristics of Employment Survey presents information on all employed persons according to their status of employment. The framework below classifies jobholders to a status of employment on the basis of their main job that is, the job in which they usually worked the most hours. The status of employment category groups are:

- Employees;
- · Owner managers of incorporated enterprises (OMIEs); and
- · Owner managers of unincorporated enterprises (OMUEs).

Employees are then further classified according to whether they had paid leave entitlements, that is whether they had paid sick and/or paid holiday leave, while OMIEs and OMUEs are further classified according to whether they had employees.



- (a) Excludes persons who were contributing family workers in their main job.
- (b) Prior to 2014, 'Employees' comprised both Employees and OMIEs, in the Labour Force and Employee Earnings, Benefits and Trade Union Membership (EEBTUM) releases.

Information is also presented on independent contractors who may be in the Employees, OMIEs or OMUEs groups. They are identified through a series of questions about their work and remuneration arrangements.

OVERVIEW

Employed Persons

- In August 2015, there were an estimated 11.6 million employed persons aged 15 years and over, of which 54% were males. (Datacube 3)
- An estimated 7.9 million (68%) employed persons worked full-time in their main job. (Datacube 4)
- Almost half (46%) of all employed persons usually worked 35–44 hours per week. Males comprised 60% of these persons.(**Datacube 5**)

Earnings

- In August 2015, the mean weekly earnings of employees and OMIEs in all jobs was \$1,202 compared with \$1,189 in 2014. (Datacube 2)
- For males, the mean weekly earnings in all jobs was \$1,420 and for females it was \$965.
- The median weekly earnings in all jobs in 2015 was \$1,000 (\$1,196 for males and \$850 for females). (Datacube 9)

Independent Contractors

- There were approximately 1 million independent contractors in their main job in August 2015. (Datacube 14)
- Independent contractors made up 9% of all employed persons, and almost three quarters (73%) of all independent contractors were males.
- More than half (55%) of independent contractors were aged 45 years and over.

Employed Persons

EMPLOYED PERSONS CHARACTERISTICS

In August 2015, there were 11.6 million employed persons, of which 9.6 million were employees, 808,100 were owner managers of incorporated enterprises (OMIEs) and 1.3 million were owner managers of unincorporated enterprises (OMUEs). (Datacube 5)

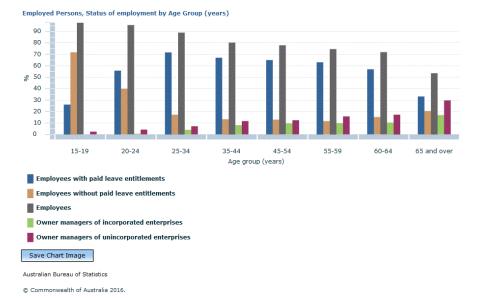
Characteristics of employed persons:

- 87% of all employed persons worked in the private sector, of whom 56% were male;
- 19% of all employed persons had been with their current employer/business for less than 1 year, 41% had been with their current employer/business for 1–5 years and 11% had been with their current employer/business for 20 years or more; (**Datacube 5**)
- 24% were usually required to be on call or standby;
- 59% usually worked five days a week; 9% usually worked six days a week; and a further 6% usually worked seven days a week;
- 18% usually worked on Saturdays, and 11% (1.3 million) usually worked on Sundays; and

• 64% worked on weekdays only, while 32% (4 million) worked on both weekdays and weekends. (Datacube 7)

STATUS OF EMPLOYMENT AND AGE

Younger persons were more likely to be employees rather than OMIEs or OMUEs. As age increases, generally the proportion of employees decreases, while the proportion of OMIEs and OMUEs increases. However, being an employee was the most common form of employment for all employed persons for all age ranges.



Source(s): Employed Persons, Status of employment by Age Group (years)-Employed Persons, Status of employment By age group

- Of employed persons aged 15–24, 96% (1.7 million) were employees, 0.4% (6,500) were OMIEs and 4% (61,300) were OMUEs;
- Of employed persons aged 35–54, 79% (4 million) were employees, 9% (451,000) were OMIEs and 12% (606,500) were OMUEs;
- Of employed persons aged 65 and over, 54% (230,600) were employees, 17% (72,700) were OMIEs and 30% (128,000) were OMUEs; and
- Just over half of employed males (52%) (140,400) aged 65 years and over were either OMIEs or OMUEs. (Datacube 6)

LEAVE ENTITLEMENTS

In August 2015, there were 9.6 million employees, of which 51% were males. Of these, 76% had paid leave entitlements, while 2.3 million were without paid leave entitlements. (**Datacube 6**)

The industry Division with the most employees without paid leave entitlements was Accommodation and food services (20%) followed by Retail trade (17%). (Datacube 6)

The occupation group with the most employees without paid leave entitlements was Sales workers and Community and personal service workers (both 20%). (Datacube 6)

As a percentage of each age group, 15–19 year olds had the highest proportion of employees without paid leave entitlements (73%). 20–24 year olds had the next highest proportion (42%). (Datacube 6)

LOCATION

New South Wales had the highest number of employed persons (3.7 million) followed by Victoria (2.9 million) and Queensland (2.3 million). Northern Territory had the lowest number of employed persons (128,800). (**Datacube 4**)

Northern Territory had the highest proportion of full-time workers in their main job (81%) followed by Australian Capital Territory (72%). Tasmania had the lowest proportion of full-time workers (63%). (Datacube 4)

INDUSTRY OF MAIN JOB

The industry division employing the most persons was Health care and social assistance (13%) followed by Retail trade (11%). Of the 5.4 million employed females, approximately 22% worked in the Health care and social assistance. In contrast, of the 6.3 million employed males, the Construction industry Division employed the most males (14%). (Datacube 5)

The Health care and social assistance industry Division employed the highest proportion of females (78%) followed by the Education and training industry Division (71%). The industry Division employing the highest proportion of males was Construction (89%) followed by Mining (85%). (Datacube 5)

OCCUPATION OF MAIN JOB

The occupation group with the most employed persons was Professionals (23%) followed by Technicians and trades workers (15%). (Datacube 5)

The occupation group with the highest proportion of males was Machinery operators and drivers (90%) followed by Technicians and trades workers (86%). In contrast, the occupation group with the highest proportion of females was Clerical and administrative workers (75%) followed by Community and personal service workers (68%). (Datacube 5)

WORKING ARRANGEMENTS

In August 2015, 3.5 million employed persons usually worked from home in their main job, comprising 59% employees, 17% OMIEs and 24% OMUEs. (Datacube 7)

Approximately 1.9 million employed persons usually worked shift work, with 92% being employees. Of those who usually worked shift work, 72% had paid leave entitlements. (Datacube 7)

There were 1.8 million employed persons who would prefer to work fewer hours than they usually worked each week in all jobs. Of these, 36% would prefer

to work 6-10 fewer weekly hours, while 1-5 fewer weekly hours and 11-15 fewer weekly hours were the next most common preference for fewer hours, both 16%. (Datacube 7)

FDUCATION

There were 7.9 million, 67% of employed persons, who had a non-school qualification. Of these:

- 16% were in the Healthcare and social assistance industry Division followed by Professional, scientific and technical services and Education and training (both 10%); and
- 31% were in the Professionals occupation group followed by Technicians and trades workers (16%). (Datacube 8)

Just over 3.5 million (30%) employed persons had a Bachelor degree or above, while 2.4 million (21%) employed persons had a Certificate III/IV. (Datacube 6)

EMPLOYEE CHARACTERISTICS

In August 2015, there were 9.6 million employees. Of these:

- 51% were males; (Datacube 5)
- 68% worked full-time in their main job;
- 63% usually worked 5 days of the week;
- 82% who worked weekdays only had paid leave entitlements;
- 81% who worked weekends only were without paid leave entitlements; (Datacube 7)
- 88% aged 55–59 years had paid leave entitlements, followed by the 35-44 and 45–54 year age groups (both 87%); and
- 82% aged 55–59 years had paid leave entitlements, followed by the 25-34 and 45–54 year age groups (both 80%). (Datacube 6)

OMIES CHARACTERISTICS

In August 2015, there were 808,100 OMIEs. Of these:

- 70% were males; (Datacube 5)
- 76% worked full-time in their main job;
- 92% had been with their current business for 1 year or more;
- 35% were Managers;
- 18% worked in the Professional, scientific and technical services industry Division;
- 36% had a Bachelor degree or above; (Datacube 6)
- 61% had employees;
- 73% usually worked from home in their business;
- 53% usually worked on weekdays only; and
- 86% usually worked 5 or more days a week. (Datacube 7)

OMUES CHARACTERISTICS

In August 2015 there were 1.3 million OMUEs. Of these:

- 64% were males; (Datacube 5)
- 61% worked full-time in their main job;
- 87% had been with their current business for 1 year or more;
- 25% were Technicians and trades workers;
- 21% worked in the Construction industry Division;
- 29% had a Certificate level qualification; (Datacube 6)
- 79% did not have employees;
- 67% usually worked from home in their business;
- 49% usually worked on weekdays only; and
- 78% usually worked 5 or more days a week. (Datacube 7)

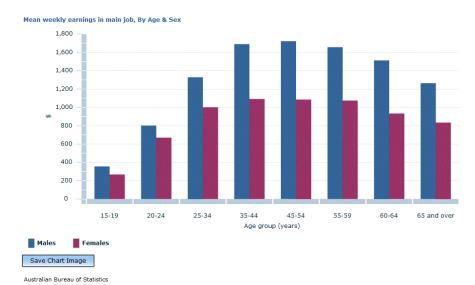
Earnings

EARNINGS IN ALL JOBS

Mean weekly earnings for full-time employees and owner managers incorporated enterprises (OMIEs) in all jobs was \$1,478 (\$1,592 for males and \$1,286 for females), an increase of 50% since August 2005 (\$983). The mean weekly earnings for part-time workers was \$568 (\$531 for males and \$582 for females), an increase of 55% since August 2005 (\$367). The mean weekly earnings for all employees and OMIEs in all jobs was \$1202, an increase of 49% since August 2005 (\$807). (Datacube 9)

EARNINGS IN MAIN JOB

MEAN WEEKLY EARNINGS



Source(s): Mean weekly earnings in main job, By Age Group and Sex-Mean weekly earnings in main job, By Age and Sex

The mean weekly earnings for employees and OMIEs in their main job in August 2015 was \$1,192 (\$1,411 for males and \$953 for females). The age groups with the highest mean weekly earnings of \$1,412 was in the 35–44 year old age group (\$1,689 for males, compared to \$1,091 for females) and \$1,400 in the 45–54 year old age group (\$1,721 for males, compared to \$1,085 for females). (**Datacube 10**)

The main job mean weekly earnings was higher for males than for females in every age group. In the 60–64 year age group the mean weekly earnings for females was 62% of that for males. In the 20–24 year age group, average weekly earnings for females were 84% of male earnings. (**Datacube 10**)

The greatest difference in mean weekly earnings between males and females was for those aged 45–54 (a difference of \$636 per week), while the smallest difference, \$88, was for those aged 15–19 years. (**Datacube 10**)

Location

Employees and OMIEs from the Australian Capital Territory had the highest mean weekly earnings in their main job (\$1,378) followed by Northern Territory (\$1,349). For males, those in Western Australia had the highest mean weekly earnings (\$1,584) followed by Australian Capital Territory (\$1,561). Whilst for females, those in Australian Capital Territory had the highest mean weekly earnings (\$1,202) followed by Northern Territory (\$1,148). (**Datacube 17**)

Industry of main job

Commonwealth of Australia 2016.

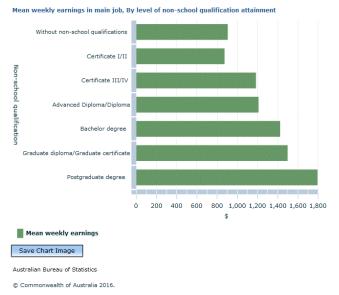
The industry Division with the highest mean weekly earnings in main job was Mining (\$2,401) followed by Electricity, gas, water and waste services (\$1,664). The industry Division with the lowest mean weekly earnings was Accommodation and food services (\$590). (**Datacube 12**)

Occupation of main job

The occupation groups with the highest mean weekly earnings was Managers (\$1,807) followed by Professionals (\$1,521). The occupation group with the lowest mean weekly earnings was Sales workers (\$682). (**Datacube 11**)

Education

Mean weekly earnings in main job for those with a non-school qualification was highest for those with a Postgraduate degree (\$1,794) while the lowest mean weekly earnings was for those with a Certificate I/II (\$874). This compares to a mean of \$905 for those without a non-school qualification. (**Datacube 13**)



Source(s): Mean weekly earnings in main job, By level of non-school qualification attainment-Mean weekly earnings in main job, By Education level

MEDIAN WEEKLY EARNINGS

In August 2015, the median weekly earnings in main job for all employees and OMIEs was \$1,000, compared to a mean of \$1,192. The difference between the mean and median shows that the high earnings of some employees and OMIEs increases the mean weekly earnings relative to median earnings. More

than 10% of employees and OMIEs in their main job earned at least twice the median - \$2,120 or more per week in their main job. (Datacube 11)

Industry and occupation of main job

Median weekly earnings was highest for employees who worked in the Mining industry Division (\$2,142) while the lowest median weekly earnings was for employees who worked in the Accommodation and food services industry Division (\$500) (**Datacube 12**). By occupation group, the highest median earnings was for Managers (\$1,453) while the lowest was for Sales workers (\$533). (**Datacube 11**)

Full-time or part-time

Median weekly earnings for full-time workers was \$1,230 compared to \$500 for part-time workers. Median weekly earnings in main job for male full-time workers was \$1,300 compared to \$1,136 for females. For part-time workers though, median weekly earnings was higher for females than males (\$503 compared to \$420 respectively). (**Datacube 11**)

Education

Median weekly earnings in main job for those with a non-school qualification was highest for those who had a Postgraduate degree (\$1,500) while the lowest median weekly earning was for those with a Certificate I/II (\$778). This compares to a median of \$800 for those without a non-school qualification.

(Datacube 13)

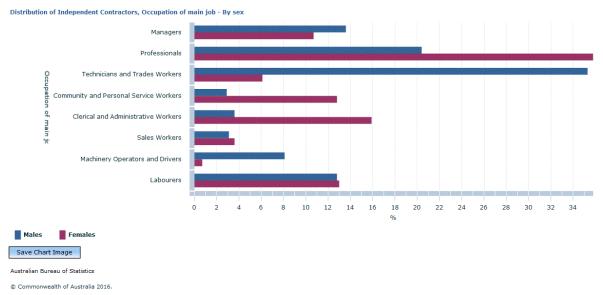
Independent Contractors

INDEPENDENT CONTRACTORS

Information presented on independent contractors consists of persons who may be employees, owner managers of incorporated enterprises (OMIEs) and owner managers of unincorporated enterprises (OMUEs).

There were just over 1 million persons who were independent contractors in August 2015. Almost three quarters (73%) of all independent contractors were males. More than half (55%) of all independent contractors were aged 45 years and over. (**Datacube 14**)

The Construction industry Division had the most independent contractors (30%) followed by the Professional, scientific and technical services industry Division (17%). These industry Divisions also had the most male independent contractors (40% and 15% respectively). By comparison, the Professional, scientific and technical services industry Division had the most female independent contractors (19%) followed by Health care and social assistance (16%). (Datacube 15)



Source(s): Distribution of Independent Contractors, Occupation of main job - By sex-Independent contractors, Occupation by Sex 2015

The occupation groups with the highest proportion of independent contractors were Technicians and trades workers (27%) and Professionals (25%). These occupation groups also employed the highest proportions of male independent contractors (35% and 20% respectively). In contrast, for female independent contractors, the occupation groups with the highest proportions were Professionals (36%) followed by Clerical and administrative workers (16%).

Other characteristics of independent contractors include:

- 93% expected to be with current employer/business in 12 months;
- 20% of those who did not expect to be with current employer/business in 12 months reported that they would be retiring;
- 14% had been with their current employer/business for less than one year, while 40% had been with their current employer/business for 10 years or more; and
- 30% of independent contractors reported their highest level of educational attainment was a Certificate III/IV. The most common educational attainment for males was a Certificate III/IV (37%), whilst for females the most common level of educational attainment was a Bachelors degree (24%).

Notes

ABOUT THIS PUBLICATION

The statistics in this release were compiled from the Characteristics of Employment (COE) Survey conducted throughout Australia in August 2015 as a supplement to the Australian Bureau of Statistics (ABS) monthly Labour Force Survey (LFS). Questions were asked of all employed persons except for those who worked as contributing family workers in their main job.

This release presents information about estimates of all employed persons in August 2015. Data are presented on the weekly earnings of employees and

owner managers of incorporated enterprises (OMIEs), independent contractors and working arrangements, including overwork, job flexibility, working patterns and locations of work. This information is cross classified by a range of personal characteristics, characteristics of employment such as full-time or part-time status, industry and occupation of main job, and demographic characteristics.

Caution should be exercised when comparing results from the 2015 Characteristics of Employment survey to previous surveys such as Forms of Employment (FOE) (2008–2013) and Employee Earnings, Benefits and Trade Union Membership (EEBTUM), as the populations in this release are not directly comparable.

For comparisons of earnings data, prior to 2014 users should use the population group 'Employees' from EEBTUM and from 2014 the population group 'Employees and OMIEs' from COE.

CONFIDENTIALITY

To minimise the risk of identifying individuals in aggregate statistics, a technique is used in this release to randomly adjust cell values. This technique is called perturbation. Perturbation involves small random adjustment of the statistics and is considered the most satisfactory technique for avoiding the release of identifiable statistics while maximising the range of information that can be released. These adjustments have a negligible impact on the underlying pattern of the statistics. After perturbation, a given published cell value will be consistent across all tables. However, adding up cell values to derive a total will not necessarily give the same result as published totals.

MICRODATA

Characteristics of Employment 2015 microdata will be available via TableBuilder (cat. no. 6333.0.0.001). For more information see About TableBuilder.

ROUNDING

As estimates have been rounded, discrepancies may occur between sums of the component items and totals.

INQUIRIES

For more information about ABS data available on request, contact National Information and Referral Service in Canberra on 1300 135 070 or via email to <cli>client.services@abs.gov.au>. The ABS Privacy Policy outlines how the ABS handles any personal information that you provide to us.

Back to top

About this Release

Contains information on: weekly earnings of employees which shows the distribution of weekly earnings of all wage and salary earners classified by full-time/part-time workers; employment characteristics which presents data on fixed-term contracts, and independent contracts all of which can be cross classified by other employment characteristics such as hours worked, industry, occupation and sector of job as well as personal characteristics.

History of changes

This document was added or updated on 01/05/2017.

23/05/2017 - Information note added to Data Cube 3: EMPLOYED PERSONS: Status of employment in main job - Timeseries. This Data Cube contains incorrect data for employees with and without paid leave entitlements for the years 2005 - 2007.

For the correction, please refer to Datacube 3 in the Characteristics of Employment, 2016 (cat. no. 6333.0) available from the Downloads tab.

01/05/2017 - Correction to Data Cube 7 and associated commentary in the main features, Employed persons, as follows:

Data Cube 7: Employed persons: Selected employment characteristics—By status of employment in main job, contained incorrect data for the data item - Whether worked weekdays and/or weekends in all jobs.

The main features that reported this incorrect data have also been updated to read:

Employed persons characteristics:

• 64% worked on weekdays only, while 32% (4 million) worked on both weekdays and weekends.

Employee Characteristics:

- 82% who worked weekdays only had paid leave entitlements;
- 81% who worked weekends only were without paid leave entitlements

OMIEs Characteristics:

• 53% usually worked on weekdays only

OMUEs Characteristics:

• 49% usually worked on weekdays only

Explanatory Notes

Explanatory Notes

EXPLANATORY NOTES

INTRODUCTION

1 The statistics in this publication were compiled from information collected in the Characteristics of Employment (COE) survey conducted throughout Australia in August 2015 as a supplement to the Australian Bureau of Statistics' (ABS) monthly Labour Force Survey (LFS). Respondents to the LFS who fell within the scope of the supplementary survey were asked further questions.

2 Information about survey design, scope, coverage and population benchmarks relevant to the monthly LFS, which also applies to supplementary surveys, can be found in the publication Labour Force, Australia (cat. no. 6202.0).

CONCEPTS, SOURCES AND METHODS

- 3 The conceptual frameworks used in the monthly LFS align closely with the standards and guidelines set out in Resolutions of the International Conference of Labour Statisticians. Descriptions of the underlying concepts and structure of Australia's labour force statistics, and the sources and methods used in compiling these estimates, are presented in Labour Statistics: Concepts, Sources and Methods (cat. no. 6102.0.55.001).
- 4 The conceptual framework for measures of mean and median earnings aligns closely with the standards and guidelines set out in the System of National Accounts 2008, and Resolutions of the International Conference of Labour Statisticians.

SCOPE

5 The scope of the LFS is restricted to people aged 15 years and over and excludes the following people:

- members of the permanent defence forces;
- certain diplomatic personnel of overseas governments, customarily excluded from the Census and estimated populations;
- overseas residents in Australia; and
- members of non-Australian defence forces (and their dependants).
- 6 Students at boarding schools, patients in hospitals, residents of homes (e.g. retirement homes, homes for people with disabilities), and inmates of prisons are excluded from all supplementary surveys.
- 7 This supplementary survey was conducted in both urban and rural areas in all states and territories, but excluded persons living in Aboriginal and Torres Strait Islander communities in very remote parts of Australia.
- 8 In addition to those already excluded from the LFS, contributing family workers, persons not in the labour force and unemployed persons were also excluded.

COVERAGE

9 The estimates in this publication relate to persons included in the survey in August 2015. In the LFS, coverage rules are applied, which aim to ensure that each person is associated with only one dwelling, and hence has only one chance of selection in the survey. See Labour Force, Australia (cat. no. 6202.0) for more details.

SAMPLE SIZE

- 10 Supplementary surveys are not always conducted on the full LFS sample. Since August 1994 the sample for supplementary surveys has been restricted to no more than seven-eighths of the LFS sample.
- 11 This survey is fully based on the sample introduced after the 2011 Census of Population and Housing. For more information, see the Article in the May 2013 issue of Labour Force, Australia (cat. no. 6202.0).

RELIABILITY OF THE ESTIMATES

- 12 Estimates in this publication are subject to sampling and non-sampling errors:
 - Sampling error is the difference between the published estimate and the value that would have been produced if all dwellings had been included in the survey. For more information, see the Technical Note.
 - Non-sampling errors are inaccuracies that occur because of imperfections in reporting by respondents and interviewers, and errors made in coding and
 processing data. These inaccuracies may occur in any enumeration, whether it be a full count or a sample. Every effort is made to reduce the nonsampling error to a minimum by careful design of questionnaires, intensive training and effective processing procedures.

SEASONALITY

13 The estimates are based on information collected in the survey month (August) and, due to seasonality, may not be representative of other months of the year.

CLASSIFICATIONS USED

- 14 Country of birth data are classified according to the Standard Australian Classification of Countries (SACC), 2011 (cat. no. 1269.0).
- 15 Occupation data are classified according to ANZSCO Australian and New Zealand Standard Classification of Occupations, 2013, Version 1.2 (cat. no. 1220.0).
- 16 Industry data are classified according to the Australian and New Zealand Standard Industrial Classification (ANZSIC), 2006 (Revision 2.0) (cat. no. 1292.0).
- 17 Education data are classified according to the Australian Standard Classification of Education (ASCED), 2001 (cat. no. 1272.0).

CONFIDENTIALITY

18 To minimise the risk of identifying individuals in aggregate statistics, a technique is used to randomly adjust cell values. This technique is called perturbation. Perturbation involves small random adjustment of the statistics and is considered the most satisfactory technique for avoiding the release of information that could identify individual survey respondents while maximising the range of information that can be released. These adjustments have a negligible impact on the underlying pattern of the statistics. After perturbation, a given published cell value will be consistent across all tables. However, adding up cell values to derive a total will not necessarily give the same result as published totals.

NOTES ON ESTIMATES

- 19 Where information relating to earnings in both main job and/or second job was not provided by the respondent, values have been imputed. In August 2015, there were 3,609 cases where information relating to earnings in main job was not provided by the respondent and 120 cases where information relating to earnings in second job was not provided by the respondent. Where this was the only information missing from the respondent record, the value was imputed based on answers provided from another respondent with similar characteristics (referred to as the "donor"). Donor records were selected for imputation of earnings in main job by matching information on sex, age, state or territory of usual residence and selected labour force characteristics (full-time or part-time in main job, industry, occupation, hours worked in main job, owner manager status) of the person with missing information.
- 20 Donor records were selected for imputation of earnings in second job by matching information on age, state or territory of usual residence, area of usual residence, owner manager status, hours worked in second job and frequency of pay in second job. Depending on which values were imputed, donors were chosen from the pool of individual records with complete information for the block of questions where the information was missing.

Earnings

21 Estimates relating to mean and median weekly earnings exclude owner managers of incorporated enterprises (OMIEs) who did not draw a wage or salary and employees who only received payment in kind.

Leave entitlements

22 Employees have been classified as "With paid leave entitlements" if they were entitled to paid sick leave and/or paid holiday leave. In all other cases, employees have been classified as "Without paid leave entitlements".

COMPARABILITY OF TIME SERIES

- 23 The LFS estimates and estimates from the supplementary surveys, (e.g. COE) are calculated in such a way as to sum to the independent estimates of the civilian population aged 15 years and over (population benchmarks). These population benchmarks are updated quarterly based on Estimated Resident Population (ERP) data. Generally, revisions are made to population benchmarks for the LFS following the final rebasing of population estimates to the latest five-yearly Census of Population and Housing, or when the need arises. However, the estimates from previous supplementary surveys are not normally revised to reflect the latest benchmarks.
- 24 From January 2014, Labour Force Estimates have been compiled using population benchmarks based on the 2011 Census of Population and Housing. At the time of publication, this issue's estimates are comparable with the published labour force estimates for August 2015.
- 25 Changes to the LFS population benchmarks impact primarily on the magnitude of the Labour Force Survey estimates (e.g. employment and unemployment) that are directly related to the underlying size of the population. For more details on population benchmarks, see the Explanatory Notes in Labour Force, Australia (cat. no. 6202.0), and for details about the revisions made, see the article in the January 2014 issue of Labour Force, Australia (cat. no. 6202.0) and the article in the November 2012 issue of Labour Force, Australia (cat. no. 6202.0).
- 26 From August 2014 collection of earnings in second job was changed to match the collection of earnings in main job. Previously, earnings in second job was collected from respondents who were employees in their second job who actually worked some hours in their second job in the reference week. Earnings were reported for those hours actually worked in that job. From 2014, earnings in second job were collected from employees in their second job regardless of whether they worked in that job in the reference week. Earnings data and frequency of pay in that second job were subsequently collected. This change will result in a break in series of earnings in all jobs and earnings in second job. Caution should be exercised when comparing second and all job earnings data from COE with previous EEBTUM data.
- 27 Caution should be exercised when comparing results from the 2015 COE to previous Employee Earnings, Benefits and Trade Union Membership surveys (EEBTUM) as the population Employees in COE is not directly comparable to the Employees population in EEBTUM. In EEBTUM Employees comprised both employees and OMIEs. For comparisons of earnings data, prior to 2014 users should use the population group Employees from EEBTUM and from 2014 the population group Employees and OMIEs from COE. In this publication time series presents the population groups on a consistent basis.
- **28** Caution should be exercised when comparing results from the 2015 COE to previous Forms of Employment surveys (FOE) (2008–2013) as the population Employees in COE is not directly comparable to the Employees population in FOE.
- 29 Prior to 2014, information about trade union membership was collected only of employees and owner managers or incorporated enterprises. From 2014 onwards, information on trade union membership is collected from all employed people. See Appendix: Status of employment and population concordance for more information.
- 30 For information on the history of changes to EEBTUM, see the Explanatory Notes (cat. no. 6310.0).
- 31 For information on the history of changes to FOE, see the Explanatory Notes (cat. no. 6359.0).

Salary sacrifice

- **32** The estimates of earnings in this publication are produced in accordance with the conceptual framework for measures of employee remuneration, as outlined in Information paper: Changes to ABS Measure of Employee Remuneration, Australia 2006 (cat. no. 6313.0).
- 33 From 2007, as a result of a change in the concept of earnings being measured, employees and OMIEs were asked to include salary sacrifice when estimating their earnings. In previous years, there was no explicit reference to the treatment of salary sacrifice. It is probable that some employees were already including amounts of salary sacrifice in their estimates of earnings, depending upon how their pay was reported. This change has resulted in a break in series. Users need to exercise care when comparing the earnings of employees and OMIEs in this release with those prior to 2007.

Imputation

- **34** From 2014, additional information relating to the number of hours usually worked and the frequency of pay in a respondent's second job were added to the imputation process for second job earnings.
- 35 From 2009, additional information relating to the number of hours that a respondent's last pay period covered in their main job was added to the imputation process for main job earnings.
- **36** Aside from the changes listed above, the current imputation method has been used since the 2005 survey. A similar method of imputation was used for the 2004 survey. The differences between the 2004 and the current imputation method are that donors are matched, where possible at a finer level of detail; and second job earnings are imputed whereas in 2004 they were not.
- 37 Prior to 2004, imputation was not used. Employees whose weekly earnings could not be determined were excluded from estimates of mean or median weekly earnings. Care should be taken when comparing earnings data from 2004 onwards with earnings data prior to 2004. To compare the change in methodology from 2003 to 2004 see paragraph 28 of the Explanatory Notes in the August 2004 Employee Earnings, Benefits and Trade Union Membership (cat. no. 6310.0).

COMPARABILITY WITH MONTHLY LFS STATISTICS

38 Due to differences in the scope and sample size of this supplementary survey and that of the monthly LFS, the estimation procedure may lead to some small variations between labour force estimates from this survey and those from the LFS.

COMPARABILITY WITH EMPLOYER-BASED SURVEYS

- **39** Caution should be exercised when comparing estimates of earnings in this release with estimates of earnings included in the biannual Average Weekly Earnings, Australia (cat. no. 6302.0) and two-yearly Employee Earnings and Hours, Australia (cat. no. 6306.0) publications. The data in both these publications are compiled from employer based surveys. There are important differences in the scope, coverage and methodology of these surveys which can result in different estimates of earnings from each survey.
- 40 The survey of Average Weekly Earnings (AWE) collects information from employers who provide details of their employees' total gross earnings and their total number of employees. The survey of Employee Earnings and Hours (EEH) collects information about weekly earnings and hours paid for, and the individual characteristics of a sample of employees within each selected employer unit. Both AWE and EEH are completed by employers with information from their payroll. However, for COE and EEBTUM, respondents are either the employed person or another adult member of their household who responds on their behalf. Where earnings are not known exactly an estimate is reported. There are also scoping differences between both household and employer surveys. For example, AWE and EEH exclude employees in the Agriculture, forestry and fishing industry, and also employees of Private households, whereas these employees are included in the COE and EEBTUM surveys.
- 41 The earnings series from AWE historically excluded amounts salary sacrificed. However, since the May 2011 AWE publication, the Average Weekly Cash Earnings (AWCE) series have also been released. These series are inclusive of salary sacrificed amounts. The key earnings series from AWE have continued to be published on the old conceptual basis (i.e. exclusive of amounts salary sacrificed) to maintain long term comparability of the key series. In EEH, the salary sacrificed amounts have been included in the estimates of mean and median weekly earnings from 2006 onwards. From 2007, COE and EEBTUM have included amounts salary sacrificed in the estimates of mean and median weekly earnings.
- 42 For further information on a number of earning series available from ABS sources, please refer to the feature article Understanding earnings in Australia using ABS statistics published in Australian Labour Market Statistics, July 2014 (cat. no. 6105.0).

PREVIOUS SURVEYS

- 43 Similar surveys on weekly earnings have been conducted annually in August since 1975, except in 1991 when the survey was conducted in July, and in 1996 when the survey was not conducted.
- 44 Prior to 1999, the EEBTUM publication was titled Weekly Earnings of Employees (Distribution), Australia (cat. no. 6310.0). The change in title reflects the inclusion of employment benefits and trade union membership data previously released in other publications.
- 45 Results of previous surveys on employment benefits have been published in Weekly Earnings of Employees (Distribution), Australia, August 1997 (cat. no. 6310.0).
- 46 Information on trade union membership was first collected in 1976, then biennially in its current format, from 1986 to 1992. From 1994, it was conducted annually (with only limited data available every second year). Results of previous surveys were published in Labour Force, Australia, December 1994, December 1995 (cat. no. 6203.0).
- 47 Limited data on trade union membership have also been published in:
 - Employment Arrangements, Retirement and Superannuation, Australia, April to July 2007 (Re-issue) (cat. no. 6361.0);
 - Weekly Earnings of Employees (Distribution), Australia, August 1997 (cat. no. 6310.0);
 - Working Arrangements, Australia, November 2000 (cat. no. 6342.0); and
 - Working Arrangements, Australia, November 2003 (cat. no. 6342.0).

PRODUCTS AND SERVICES

- **48** A number of Datacubes (spreadsheets) containing all tables produced for this publication are available from the Downloads tab of the publication. The Datacubes present tables of estimates and their corresponding Relative Standard Errors (RSEs).
- **49** For users who wish to undertake a more detailed analysis of the data, the survey microdata will be released through the TableBuilder product. For more details, refer to the TableBuilder information, Microdata, Characteristics of Employment, Australia (cat. no. 6333.0.00.001). For more information see About TableBuilder.
- **50** Special tabulations are available on request. Subject to confidentiality and sampling variability constraints, tabulations can be produced from the survey incorporating data items, populations and geographic area selections to meet individual requirements. These can be provided in printed or electronic form. All enquiries should be made to the National Information and Referral Service on 1300 135 070.

NEXT SURVEY

51 This survey is conducted in August 2016. Information on trade union membership and persons who found their job through a labour hire firm/employment agency is contained in this survey.

ACKNOWLEDGEMENT

52 ABS surveys draw extensively on information provided freely by individuals, businesses, governments and other organisations. Their continued cooperation is very much appreciated: without it, the wide range of statistics published by the ABS would not be available. Information received by the ABS is treated in strict confidence as required by the **Census and Statistics Act, 1905**.

RELATED PUBLICATIONS

- 53 Refer to Related Information tab for other ABS publications which may be of interest.
- 54 Current publications and other products released by the ABS are available from the Statistics Page on the ABS website. The ABS also issues a daily Release Advice on the website which details products to be released in the week ahead.

Glossary

GLOSSARY

Agreement to work flexible hours

An agreement that is either in writing or otherwise. A written agreement can be in the form of, but not limited to, an individual written agreement between an employer and employee, or a Collective Agreement or Certified Agreement (CA) made directly between an employer and a group of employees.

Born in Australia

Includes persons born in Australia, Norfolk Island and Australian External Territories.

Continuous duration with current employer/business

The length of the current period of employment people had with their employer or in their own business. The length of time includes periods of paid leave, unpaid leave or strike.

Did not draw a wage or salary

Consists of persons who worked in their own incorporated enterprise only i.e. Owner managers of incorporated enterprises (OMIEs)

Employed persons

People aged 15 years and over who, during the reference week:

- worked for one hour or more for pay, profit, commission or payment in kind, in a job or business or on a farm (comprising employees, employers and own account workers); or
- worked for one hour or more without pay in a family business or on a farm (i.e. contributing family workers); or
- were employees who had a job but were not at work and were:
 - away from work for less than four weeks up to the end of the reference week;
 - away from work for more than four weeks up to the end of the reference week and received pay for some or all of the four week period to the end of the reference week;
 - · away from work as a standard work or shift arrangement;
 - · on strike or locked out;
 - · on workers' compensation and expected to return to their job; or
- were employers or own account workers who had a job, business or farm, but were not at work.

Contributing family workers in their main job were excluded from the Characteristics of Employment Survey.

Employees

From August 2014, the Characteristics of Employment (COE) Survey definition of employees differs from the definition used in surveys prior to July 2014 including, the Labour Force Survey, other household surveys (including earlier Forms of Employment, Employee Earnings, Benefits and Trade Union Membership and Working Time Arrangements surveys). See Appendix: Status of employment and population concordance for more information.

Employees are persons who:

- worked for a public or private employer; and
- received remuneration in wages or salary; or are paid a retainer fee by their employer and worked on a commission basis, for tips, piece-rates or payment in kind.

Fixed-term contract

A contract of employment which specifies that the employment will be terminated on a particular date/event.

Full-time workers in main job

People who were employees in their main job and were:

- Single job holders who usually work 35 hours or more a week, or usually work fewer than 35 hours but worked 35 hours or more during the reference week; or
- Multiple job holders who usually work 35 hours or more in their main job and those who, although usually working fewer than 35 hours in their main job, worked 35 hours or more during the reference week.

Full-time workers

Employed persons who usually worked 35 hours or more a week (in all jobs) and others who, although usually worked less than 35 hours a week, worked 35 hours or more during the reference week. These people were classified as full-time workers.

Holiday leave

The entitlement of an employee to paid holiday, paid vacation or paid recreation leave in their main job.

Hours paid for in main job

The number of hours for which employees and OMIEs were paid in their main job in their last pay, not necessarily the number of hours actually worked during the reference week (e.g. a person on paid leave for the week was asked to report the number of hours for which they were paid).

Hours usually worked

The number of hours usually worked in a week.

Hours worked

The number of hours actually worked during the reference week.

Independent contractors

Independent contractors are persons who operate their own business and who are contracted to perform services for others without having the legal status

of an employee, i.e. persons who are engaged by a client, rather than an employer to undertake the work. Independent contractors are engaged under a contract for services (a commercial contract), whereas employees are engaged under a contract of service (an employment contract).

Independent contractors' employment may take a variety of forms, for example, they may have a direct relationship with a client or work through an intermediary. Independent contractors may have employees, however they spend most of their time directly engaged with clients or on client tasks, rather than managing their staff.

Industry

An industry is a group of businesses or organisations that undertake similar economic activities to produce goods and/or services. In this publication, industry refers to ANZSIC Division as classified according to the Australian and New Zealand Standard Industrial Classification (ANZSIC), 2006 (Revision 2.0) (cat. no. 1292.0).

Level of highest educational attainment

Level of highest educational attainment identifies the highest achievement a person has attained in any area of study. It is not a measurement of the relative importance of different fields of study but a ranking of qualifications and other educational attainments regardless of the particular area of study or the type of institution in which the study was undertaken. It is categorised according to the Australian Standard Classification of Education, 2001 (cat. no. 1272.0) Level of education classification.

Level of highest non-school qualification

A person's level of highest non-school qualification is the highest qualification a person has attained in any area of formal study other than school study. It is categorised according to the Australian Standard Classification of Education, 2001 (cat. no. 1272.0) Level of education classification.

Main iob

The job in which the most hours were usually worked.

Maternity/paternity leave

The provision by an employer of paid maternity/paternity leave.

Mean weekly earnings

The amount obtained by dividing the total earnings of a group by the number of employees and OMIEs in that group.

Median weekly earnings

The amount which divides the distribution of employees and OMIEs into two groups of equal size, one having earnings above and the other below that amount.

Multiple jobholder

Employed persons who, during the reference week, worked in more than one job. Multiple jobholders exclude those who changed employer during the reference week. People who were unpaid voluntary workers or on unpaid trainee/work placement in their second job were excluded from the Multiple jobholder population.

Information on earnings in main job is collected from all multiple jobholders. Information on earnings in second job is only collected from multiple jobholders who were employees or OMIEs in their second job and were an employee or OMIEs in their main job.

Occupation

An occupation is a collection of jobs that are sufficiently similar in their title and tasks, skill level and skill specialisation which are grouped together for the purposes of classification. In this publication, occupation refers to Major Group and Sub-Major Group as defined by ANZSCO - Australian and New Zealand Standard Classification of Occupations, 2013, Version 1.2 (cat. no. 1220.0).

On call

A shift arrangement, for being available, when not at work, to be contacted to resume work. An allowance may be paid to the employee for being on call.

Overtime

Work undertaken which is outside, or in addition to, ordinary working hours in main job, whether paid or unpaid.

Owner managers of incorporated enterprises (OMIEs)

People who work in their own incorporated enterprise, that is, a business entity which is registered as a separate legal entity to its members or owners (may also be known as a limited liability company).

An owner manager of an incorporated enterprise may or may not hire one or more employees in addition to themselves and/or other owners of that business. See Status of Employment for more information.

Owner managers of unincorporated enterprises (OMUEs)

A person who operates his or her own unincorporated enterprise or engages independently in a profession or trade.

An owner manager of an unincorporated enterprise may or may not hire one or more employees in addition to themselves and/or other owners of that business. See Status of Employment for more information.

Paid leave entitlements

The entitlement of employees to either paid holiday leave, paid sick leave in their main job.

Part-time workers in main job

People who were employees in their main job and were:

- Single job holders who usually work fewer than 35 hours a week, and did so in the reference week; or
- Multiple job holders who actually worked fewer than 35 hours in their main job in the reference week, or were away from their main job but usually work
 fewer than 35 hours a week in their main job.

Part-time workers

Employed persons who usually worked fewer than 35 hours a week (in all jobs) and either did so during the reference week, or were not at work in the reference week. In this publication, part-time workers relates to part-time workers who were employees in their main job.

Reference week

The week preceding the week in which the interview was conducted.

Second job

A job, other than the main job.

Sector of main job

Sector of main job is used to classify a respondent's employer as a public or private enterprise. The public sector includes all government units, such as government departments, non-market non-profit institutions that are controlled and mainly financed by government, and corporations and quasi-corporations that are controlled by government.

Shift work

A system of working whereby the daily hours of operation at the place of employment are split into at least two set work periods (shifts) for different groups of workers. Types of shifts include:

- Irregular shifts Describes shifts that do not follow a set pattern.
- Regular shifts Shifts worked to a set pattern of times. Regular shift times are presented as follows:
 - morning shifts between 6.00am and 12.00pm;
 - afternoon shifts between 12.00pm and 5.00pm; and
 - evening, night or graveyard shift between 5.00pm and 6.00am
- Rotating shift A shift arrangement, in which the shift worked changes periodically from one time period to another, for example from mornings or afternoons to evenings or nights.
- Split shift Occurs when the worked period is broken by an extended unpaid 'free' period, thereby constituting an extended working day consisting of two (or more) shifts.

Sick leave

The entitlement of an employee to paid sick leave in their main job.

Standby

People who are usually waiting to restart work or people who have had to restart work after being recalled, without additional pay and allowances.

Status of Employment

Status of employment is determined by an employed person's position in relation to their job, and is usually in respect of a person's main job if they hold more than one job. Employed persons are classified according to the reported relationship between the person and the enterprise for which they work, together with the legal status of the enterprise where this can be established. The groups include:

- Employees
- OMIEs
 - OMIEs with employees
 - · OMIEs without employees
- OMUEs
 - OMUEs with employees
 - OMUEs without employees and
- · Contributing family workers.

Weekly earnings

Amount of 'last total pay' (i.e. before taxation, salary sacrifice and other deductions had been made) from wage and salary jobs prior to the interview. For persons paid other than weekly, earnings were converted to a weekly equivalent. No adjustment was made for any back payment of wage increases, prepayment of leave or bonuses, etc.

With paid leave entitlements

Employees who were entitled to either paid holiday leave or paid sick leave (or both) in their main job.

Without paid leave entitlements

Employees who were not entitled to paid holiday leave and paid sick leave, or did not know whether they were entitled to paid holiday leave or paid sick leave in their main job.

Worked on a fixed-term contract

Employees with a contract of employment which specifies that the employment will be terminated on a particular date/event.

Back to top

Populations and Data items list (Appendix)

APPENDIX POPULATIONS

DATA AVAILABLE ON REQUEST

The ABS has a range of data available on request from the Characteristics of Employment Survey. This section lists the populations which are used in this release. Full details of the data items are available on the ABS website in an Excel spreadsheet, under the Downloads tab: Data Cube: Populations and Data items list.

The population(s) for a particular data item refers to the persons in the survey to whom the data item relates.

For more information about ABS data available on request, contact Client Services Section in Canberra on 1300 135 070 or via email <cli>client.services@abs.gov.au>.

The ABS Privacy Policy outlines how the ABS will handle any personal information that you provide to us.

Population 1

Employed persons

Population 2

Employees in main job

Population 3

Employees and Owner managers of incorporated enterprises (OMIEs) in main job

Population 4

Owner managers of incorporated enterprises (OMIEs) in main job

Population 5

Owner managers of unincorporated enterprises (OMUEs) in main job

Population 6

Employed persons who preferred to work more hours than usually worked

Population 7

Independent contractors

Population 8

Multiple job holders

Population 9

Employees in second job

Population 10

Employees and Owner managers of incorporated enterprises (OMIEs) in second job

Data items		Population
1	State or territory of usual residence	All
2	Region of usual residence (SA4)	All
3	Sex	All
4	Social marital status	All
5	Relationship in household	All
6	Country of birth	All
7	Country of birth and elapsed years since arrival in Australia	All
8	Age group (years)	All
9	Number of dependents aged 15 to 24 years	All
10	Number of dependents aged 0 to 15 years	All
11	Number of dependents aged 0 to 24 years	All
12	Whether currently studying full-time or part-time	All
13	Level of highest educational attainment	All
14	Level of highest non-school qualification	All
15	Highest year of school completed	All
16	Labour force status	All
17	Status of employment in main job	All
18	Whether held more than one job	All
19	Number of jobs or businesses held last week (held concurrently)	All
20	Main reason for absence from work	All
21	Hours actually worked in main job	All
22	Hours actually worked in all jobs	All
23	Hours usually worked in main job	All
24	Hours usually worked in all jobs	All
25	Full-time or part-time status in all jobs	All
26	Full-time or part-time status in main job	All
27	Underemployment status	All
28	Reason worked less hours than usually worked	All
29 30	Preferred total number of weekly hours	6
31	Preferred number of extra weekly hours Whether available to start work within the reference week with more hours	6 1-5, 7-10
32		1-5, 7-10 1-5, 7-10
	Whether prefer and available within the next 4 weeks for more full-time or part-time hours	The state of the s
33 34	Continuous duration with current employer/business Expected future duration with current employer/business	All
34 35		All
36	Reason expected future duration with current employer/business less than 12 months Sector of main job	All All
37	Occupation of main job	All
38	Industry of main job	All
39	Whether entitled to paid holiday leave	2
40	Whether entitled to paid sick leave	2
41	Whether entitled to paid maternity/paternity leave	2
42	Whether had paid leave entitlements	2
43	Whether retrenched from any job in the previous 3 months	All
44	Weekly earnings in main job	2–4. 9–10
45	Weekly earnings in second job	9–10
46	Weekly earnings in all jobs	2–4. 9–10
47	weekly earlings in an jous Hours paid for in main job	2-4, 9-10
48	Hours paid for in second job	9–10
49	Hourly earnings in main job	2–4. 9–10
50	Hourly earnings in second job	9–10
51	Frequency of pay in main job	2–4, 9–10
52	Whether employment had a set completion date/event in main job	2-4, 9-10
53	whether employment had a set completion date/event in main job Time until set employment completion date/event in main job	2

54	Length of fixed term contract in main job	2
55	Whether considered to be an independent contractor	All
56	Status of employment of second job	8-10
57	Whether usually worked any paid or unpaid extra hours or overtime	All
58	Whether usually required to be on call or standby	All
59	Whether usually worked shift work and type of shift usually worked	All
60	Whether had an agreement with employer to work flexible hours	All
61	Whether preferred to work fewer hours each week and total number of preferred weekly hours in all jobs	All
62	Whether preferred to work fewer hours each week and preferred number of fewer weekly hours in all jobs	All
63	Whether usually worked from home in job/business and main reason worked from home in job or business	All
64	Days of the week usually worked in all jobs	All
65	Number of days of the week usually worked in all jobs	All
66	Whether worked weekdays and/or weekends in all jobs	All

Population concordance (Appendix)

APPENDIX POPULATION CONCORDANCE

POPULATION CONCORDANCE WITH PREVIOUS SURVEYS

This release uses elements from Characteristics of Employment (COE) 2014 as well as key elements from the Employee Earnings, Benefits and Trade Union Membership survey (EEBTUM), Forms of Employment survey (FOE), Working Time Arrangements survey (WTA) and Locations of Work survey (LOW) to provide a comprehensive and coherent dataset on characteristics of people's employment.

Caution should be exercised when comparing the estimates from this release with previous surveys as some population groups are conceptually different.

The following table provides a concordance of populations groups used in this release with population groups from previous surveys:

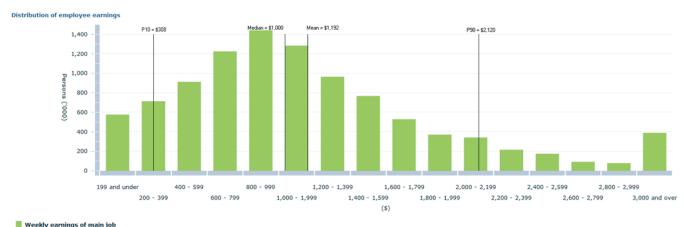
Population Concordance					
Populations	COE 2015	COE 2014			
Employed Persons	Population 1	Population 1			
Employees in main job	Population 2	Population 2			
Employees and Owner Managers of Incorporated Enterprises (OMIEs) in main job	Population 3	Population 3			
Owner Managers of Incorporated Enterprises (OMIEs) in main job	Population 4	Population 4			
Owner Managers of Unincorporated Enterprises (OMUEs) n main job	Population 5	Population 5			
Employed persons who preferred to work more hours than usually worked	Population 6	Population 6			
Frade union members in their main job		Population 7 (a			
Frade union members		Population 8 (a			
ndependent contractors	Population 7	Population 9			
Persons who found their job through a labour hire firm/employment agency		Population 10			
Multiple job holders	Population 8	Population 11			
Employees in second job	Population 9	Population 12			
Employees and Owner Managers of Incorporated Enterprises (OMIEs) in second job	Population 10	Population 13			

^{...} not applicable

Distribution of earnings (Appendix)

DISTRIBUTION OF EARNINGS

At August 2015, the mean weekly earnings of employees and owner managers of incorporated enterprises (OMIEs) was higher than median weekly earnings. This difference demonstrates the asymmetric distribution of earnings, where a relatively small number of employees and OMIEs have comparatively very high earnings. This is illustrated in the graph below.



While median and mean earnings provide useful information about earnings distributions, they do not capture all the information about the distribution. It is also useful to consider percentiles, which measure the spread of earnings across the population. For example, the 10th percentile, P10, separates the population into the bottom 10% (lowest earners) and top 90%, while P90 separates the population into the bottom 90% and the top 10% (highest earners). At August 2015, P10 for weekly earnings in main job was \$308, while P90 for weekly earnings in main job was \$2,120. (Datacube 11)

As would be expected, the distribution of weekly earnings of part-time employees and OMIEs was concentrated in lower earning groups with 59% earning under \$600 per week. For full-time employees and OMIEs, 68% earned \$1,000 or more per week. For male full-time employees and OMIEs, the mean weekly earnings in main job was \$1,591 and the median weekly earnings in main job was \$1,300. For female full-time employees and OMIEs, the mean weekly earnings in main job was \$1,289 and the median weekly earnings in main job was \$1,136. For part-time employees and OMIEs, the mean weekly earnings in main job for males was \$540 and the median weekly earnings was \$420. Whilst for females the mean weekly earnings was \$578 and the median \$503. (Datacube 11)

⁽a) From 2014 this population group includes OMUEs

Data Cubes (I-Note) - Data Cubes

Datacube 3: EMPLOYED PERSONS: Status of employment in main job - Timeseries, contains incorrect data for employees with and without paid leave entitlements for the years 2005 - 2007.

For the correction, please refer to Datacube 3 in the Characteristics of Employment, 2016 (cat. no. 6333.0) available from the Downloads tab.

Data Quality (Technical Note) (Technical Note)

TECHNICAL NOTE DATA QUALITY

INTRODUCTION

1 Since the estimates in this publication are based on information obtained from occupants of a sample of dwellings, they are subject to sampling variability. That is, they may differ from those estimates that would have been produced if all dwellings had been included in the survey. One measure of the likely difference is given by the standard error (SE), which indicates the extent to which an estimate might have varied by chance because only a sample of dwellings was included. There are about two chances in three (67%) that a sample estimate will differ by less than one SE from the number that would have been obtained if all dwellings had been included, and about 19 chances in 20 (95%) that the difference will be less than two SEs.

2 Another measure of the likely difference is the relative standard error (RSE), which is obtained by expressing the SE as a percentage of the estimate.

 $RSE\% = (SE/estimate) \times 100$

- **3** RSEs for Characteristics of Employment estimates have been calculated using the Jackknife method of variance estimation. This process involves the calculation of 30 'replicate' estimates based on 30 different sub-samples of the original sample. The variability of estimates obtained from these sub-samples is used to estimate the sample variability surrounding the main estimate.
- 4 The Excel spreadsheets in the Downloads tab contain all the tables produced for this release and the calculated RSEs for each of the estimates. The RSEs for estimates other than medians have been calculated using the Jackknife method, and RSEs for the medians have been calculated using the Woodruff method.

5 In the tables in this publication, only estimates (numbers, percentages, means and medians) with RSEs less than 25% are considered sufficiently reliable for most purposes. However, estimates with larger RSEs have been included. Estimates with an RSE in the range 25% to 50% should be used with caution while estimates with RSEs greater than 50% are considered too unreliable for general use. All cells in the Excel spreadsheets with RSEs greater than 25% contain a comment indicating the size of the RSE. These cells can be identified by a red indicator in the corner of the cell. The comment appears when the mouse pointer hovers over the cell.

CALCULATION OF STANDARD ERROR

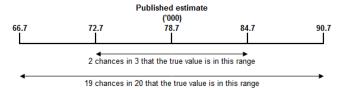
6 RSEs are routinely presented as the measure of sampling error in this publication and related products. SEs can be calculated using the estimates (counts or means) and the corresponding RSEs.

7 An example of the calculation of the SE from an RSE follows. **Data Cube 4** shows that the estimated number of males aged 55–59 years who were employed part-time was 78,700 in August 2015, and the RSE for this estimate was 7.6%. The SE is:

SE of estimate

- = (RSE / 100) x estimate
- $= 0.076 \times 78,700$
- = 6,000 (rounded to the nearest 100)

8 Therefore, there are about two chances in three that the value that would have been produced if all dwellings had been included in the survey would fall within the range 72,700 to 84,700 and about 19 chances in 20 that the value would fall within the range 66.700 to 90.700. This example is illustrated in the following diagram.



PROPORTIONS AND PERCENTAGES

- **9** Proportions and percentages formed from the ratio of two estimates are also subject to sampling errors. The size of the error depends on the accuracy of both the numerator and the denominator. A formula to approximate the RSEs of proportions not provided in the spreadsheets is given below. This formula is only valid when x is a subset of y.
- 10 Considering the Data Cube 4, of the 1,503,900 males aged 25-34 years who were employed, 1,314,700 or 87.4% who were full-time workers. The RSE of 1,314,700 is 1.2% and the RSE for 1,503,900 is 1.0%. Applying the above formula, the RSE for the proportion of males aged 25–34 years who were full-time workers:

$$RSE = \sqrt{(1.2)^2 - (1.0)^2} = 0.7\%$$

11 Therefore, the SE for the proportion of males aged 25–34 years who were full-time workers was 0.6 percentage points (= (87.4/100) x 0.7). Therefore, there are about two chances in three that the proportion of males aged 25–34 years who were full-time workers is between 86.8% and 88.0%, and 19 chances in 20 that the proportion was within the range 86.2% to 88.6%.

SUMS OR DIFFERENCES BETWEEN ESTIMATES

12 Published estimates may also be used to calculate the sum of two or more estimates, or the difference between two survey estimates (of numbers,

means or percentages) where these are not provided in the spreadsheets. Such estimates are also subject to sampling error.

13 The sampling error of the difference between two estimates depends on their SEs and the relationship (correlation) between them. An approximate SE of the difference between two estimates (x–y) may be calculated by the following formula:

$$RSE\left(\frac{x}{y}\right) = \sqrt{[RSE(x)]^2 - [RSE(y)]^2}$$

14 The sampling error of the sum of two estimates is calculated in a similar way. An approximate SE of the sum of two estimates (x+y) may be calculated by the following formula:

$$SE(x + y) = \sqrt{[RSE(x)]^2 - [RSE(y)]^2}$$

15 Considering the example in paragraph 7, the estimated number of males aged 55–59 years who were employed part-time was 78,700, and the SE for this estimate was 6,000. From the **Data Cube 4**, the estimate of males aged 60-64 years who were employed part-time was 89,100 and the SE was 5,300. The estimate of males aged 55–64 years who were employed part-time is:

$$78,700 + 89,100 = 167,800$$

16 The SE of the estimate of males aged 55-64 years who were employed part-time is:

$$SE = \sqrt{(6,000)^2 + (5,300)^2} = 8,000$$

- 17 Therefore, there are about two chances in three that the value that would have been produced if all dwellings had been included in the survey would fall within the range 159,800 to 175,800 and about 19 chances in 20 that the value would fall within the range 151,800 to 183,800.
- 18 While these formulae will only be exact for sums of, or differences between, separate and uncorrelated characteristics or subpopulations, it is expected to provide a good approximation for all sums or differences likely to be of interest in this publication.

STANDARD ERRORS OF MEANS AND SUMS

19 The estimates of means and sums of continuous variables are subject to sampling variability and random adjustment. As for population estimates, the variability due to sampling and random adjustment is combined into the calculated Standard Error, and the Relative Standard Error is reported. The component of variability arising from sampling is calculated using the Jackknife method.

STANDARD ERRORS OF QUANTILES

20 The estimates of quantiles such as medians, quartiles, quintiles and deciles are subject to sampling variability and random adjustment. As for population estimates, the variability due to sampling and random adjustment is combined into the calculated Standard Error, and the Relative Standard Error is reported. The component of variability arising from sampling is calculated using the Woodruff method. This is also true for Equal Distribution Quantiles.

SELECTED ESTIMATES AND RSES

The following table shows how the RSEs are displayed for selected estimates in the datacubes.

T14 - Independent contractors, Age group years and state or territory of usual residence - By sex

		Se	Sex of person		
		Males	Females	Persons	
Weight	ted Count				
Age group (years)					
15–19	'000	5.8	2.6	8.7	
20-24	'000	25.3	12.0	39.0	
25-34	'000	134.0	48.8	179.6	
35-44	'000	156.1	74.6	230.7	
45-54	'000	185.7	65.4	253.0	
55-59	'000	86.4	30.6	117.6	
60-64	'000	70.4	21.2	92.1	
65 and over	'000	72.9	16.9	89.9	
State or territory of usual res	sidence				
New South Wales	'000	232.5	76.0	311.5	
Victoria	'000	189.5	67.9	254.5	
Queensland	'000	136.7	60.0	196.1	
South Australia	'000	43.3	22.6	66.6	
Western Australia	'000	105.3	34.2	140.6	
Tasmania	'000	12.9	4.2	16.6	
Northern Territory	'000	6.4	1.5	7.7	
Australian Capital	Territory '000	10.3	3.9	14.5	
Total	'000	738.3	273.3	1,012.2	
Relative Standard E	rror of weighted count				
Age group (years)	-				
15–19	RSE %	43.8*	60.5**	28.5	
20-24	RSE %	15.9	26.1*	13.2	
25-34	RSE %	6.3	14.9	6.7	
35-44	RSE %	5.4	7.1	4.8	
45-54	RSE %	5.5	8.3	4.3	
54-59	RSE %	7.8	11.4	6.4	
60-64	RSE %	7.3	13.3	5.6	
65 and over	RSE %	7.8	17.9	8.0	
State or territory of usual res	sidence				
New South Wales	RSE %	4.6	8.6	4.5	
Victoria	RSE %	5.7	10.8	6.1	
Queensland	RSE %	6.4	11.4	6.7	
South Australia	RSE %	8.8	11.9	8.2	
Western Australia	RSE %	7.3	12.0	6.9	
Tasmania	RSE %	11.8	18.2	11.5	
Northern Territory	RSE %	16.4	27.4*	15.4	
Australian Capital	Territory RSE %	15.3	26.1*	12.7	
Total	RSE %	2.7	5.4	2.6	

^{*} estimate has a relative standard error of 25% to 50% and should be used with caution

SIGNIFICANCE TESTING

21 A statistical test for any comparisons between estimates can be performed to determine whether it is likely that there is a significant difference between two corresponding population characteristics. The standard error of the difference between two corresponding estimates (x and y) can be calculated using the formula in paragraph 9. This standard error is then used to calculate the following test statistic:

^{**} estimate has a relative standard error greater than 50% and is considered too unreliable for general use

 $\left(\frac{x-y}{SE(x-y)}\right)$

22 If the value of this test statistic is greater than 1.96 then there is evidence, with a 95% level of confidence, of a statistically significant difference in the two populations with respect to that characteristic. Otherwise, it cannot be stated with confidence that there is a difference between the populations with respect to that characteristic.

23 The imprecision due to sampling variability, which is measured by the SE, should not be confused with inaccuracies that may occur because of imperfections in reporting by respondents and recording by interviewers, and errors made in coding and processing data. Inaccuracies of this kind are referred to as non-sampling error, and they occur in any enumeration, whether it be a full count or sample. Every effort is made to reduce non-sampling error to a minimum by careful design of questionnaires, intensive training and supervision of interviewers, and efficient operating procedures.

Back to top

Quality Declaration - Summary

QUALITY DECLARATION - SUMMARY

INSTITUTIONAL ENVIRONMENT

For information on the institutional environment of the Australian Bureau of Statistics (ABS), including the legislative obligations of the ABS, financing and governance arrangements, and mechanisms for scrutiny of ABS operations, please see ABS Institutional Environment.

RELEVANCE

The Survey of Characteristics of Employment (COE) presents information about the distribution of weekly earnings in main job and all jobs, employment arrangements, independent contracting, fixed-term employment and working arrangements. The collection of a range of socio-demographic and labour force characteristics makes the datasets produced from the survey extremely valuable for comparing and analysing the distribution of both weekly earnings and employment benefits across different population groups. Data are used in the development and review of wages and labour market policies, and in wage negotiation processes.

TIMELINESS

The Characteristics of Employment survey is conducted annually in August as a supplement to the Australian Bureau of Statistics (ABS) monthly Labour Force Survey (LFS). Results from this survey are released in the publication Characteristics of Employment, Australia (cat. no. 6333.0).

ACCURACY

Estimates from the Characteristics of Employment Survey are subject to sampling and non-sampling errors. Relative standard error (RSE) is a measure of the size of the sampling error affecting and estimate, i.e. the error introduced by basing estimates on a sample of the population rather than the full population. Non-sampling errors are inaccuracies that occur due to imperfections in reporting by respondents and interviewers, and errors made in coding and processing data.

This publication was designed primarily to provide estimates at the Australia level. Broad estimates are available for state/territory and/or capital city/balance of state, though users should exercise caution when using estimates at this level because of the presence of high sampling errors. Relative Standard Errors for all estimates are available in the relevant Data Cube. More information on Standard Errors is available in the Technical Note of this release.

To minimise the risk of identifying individuals in aggregate statistics, a technique is used in this release to randomly adjust cell values. This technique is called perturbation. Perturbation involves small random adjustment of the statistics and is considered the most satisfactory technique for avoiding the release of identifiable statistics while maximising the range of information that can be released. These adjustments have a negligible impact on the underlying pattern of the statistics. After perturbation, a given published cell value will be consistent across all tables. However, adding up cell values to derive a total will not necessarily give the same result as published totals.

For further information regarding the accuracy of the COE survey estimates see the Technical Note.

COHERENCE

This release uses elements from COE14 as well as key elements from the previous separate Employee Earnings, Benefits and Trade Union Membership survey (EEBTUM), Forms of Employment survey (FOE), Working Time Arrangements survey (WTA) and Locations of Work survey (LOW) to provide a comprehensive and coherent dataset on characteristics of people's employment.

Caution should be exercised when comparing the estimates from this release with previous surveys as some data items have changed and population groups are conceptually different.

Caution should be exercised when comparing results from the 2015 COE to previous FOE (2008–2013) and EEBTUM as the population Employees in this release is not directly comparable to the Employees population in both FOE and EEBTUM.

For information on the comparability of time series for the publication Employee Earnings, Benefits and Trade Union Membership, Australia (cat. no. 6310.0), see the Explanatory Notes.

For information on the comparability of time series for the publication Forms of Employment, Australia (cat. no. 6359.0), see the Explanatory Notes.

For information on the comparability of time series for the publication Working Time Arrangements, Australia (cat. no. 6342.0), see the Explanatory Notes.

INTERPRETABILITY

Contained within COE are Data Cubes with footnoted data to aid interpretation of the results of the survey. Detailed Explanatory Notes, a Technical Note and a Glossary are also included providing information on the terminology, classifications and other technical aspects associated with these statistics.

Further commentary is often available through articles and data published in other ABS products, including:

- Australian Labour Market Statistics (cat. no. 6105.0).
- Concepts, Sources and Methods (cat. no. 6102.0.55.001)

DATA ACCESS

Characteristics of Employment, Australia (cat. no. 6333.0) is released electronically via the ABS website as Data Cubes in spreadsheet format. Additional data may be available on request (subject to data quality). Note that detailed data can be subject to high relative standard errors. Full details of data items for this survey are available from the Downloads tabs in Data Cube: COE 2015 Populations and Data items list.

For users who wish to undertake a more detailed analysis of the data, the survey microdata will be released through the TableBuilder product. For more details, refer to the TableBuilder information, Microdata, Characteristics of Employment, Australia (cat. no. 6333.0.00.001). For more information see About TableBuilder

For further information about ABS data available on request, contact the National Information and Referral Centre on 1300 135 070 or via email to <cli>client.services@abs.gov.au>.

Back to top

© Commonwealth of Australia

All data and other material produced by the Australian Bureau of Statistics (ABS) constitutes Commonwealth copyright administered by the ABS. The ABS reserves the right to set out the terms and conditions for the use of such material. Unless otherwise noted, all material on this website – except the ABS logo, the Commonwealth Coat of Arms, and any material protected by a trade mark – is licensed under a Creative Commons Attribution 2.5 Australia licence